

Claims:

1. A method for using a laser alignment device to project a laser generated image at a distance, the method comprising:

providing a laser source to produce a beam of laser radiation; and

positioning a transmission mask in the path of the beam to modify the shape of the transmitted beam.
2. The method of claim 1 wherein the transmission mask has a substantially opaque region, and a substantially translucent region in the shape of an image.
3. The method of claim 2 wherein the mask contains an aperture within the substantially translucent region.
4. The method of claim 1 wherein the transmission mask is formed from a holographic film.
5. The method of claim 4 wherein the transmission mask contains a holographic image within the holographic film.
6. The method of claim 5 wherein the transmission mask contains an aperture in the holographic film within the holographic image.
7. The method of claim 1 further comprising positioning a reflective element in the path of the beam of laser radiation to produce one or more laterally reflected beams.
8. The method of claim 7 wherein the transmission mask is positioned in the path of a laterally reflected beam.
9. An apparatus for use with a laser alignment device for projecting a laser generated image at a distance, comprising:

a laser source to produce a beam of laser radiation; and

a transmission mask, positioned in the path of the beam, to modify the shape of the transmitted beam.

10. The apparatus of claim 9 wherein the transmission mask has a substantially opaque region and a substantially translucent region, the translucent region on the shape of an image.

11. The apparatus of claim 10 wherein the mask contains an aperture within the substantially translucent region.

12. The apparatus of claim 9 wherein the transmission mask is formed from a holographic film.

13. The apparatus of claim 9 wherein the transmission mask contains a holographic image within the holographic film.

14. The apparatus of claim 13 wherein the transmission mask contains an aperture in the holographic film within the holographic image.

15. The apparatus of claim 9 further comprising a unitary reflective element positioned in the path of the beam to produce a plurality of beams, the reflective element defining a central aperture, at least two substantially planar reflective surfaces positioned around the central aperture for creating laterally reflected beams from the beam of laser radiation, and other sections located in-between the substantially planar reflective surfaces such that the substantially planar reflective surfaces are not adjacent one another.

16. The apparatus of claim 15 wherein the transmission mask is positioned in the path of a laterally reflected beam.

17. The apparatus of claim 15 wherein the planar surfaces have elliptical cross sections.
18. The apparatus of claim 15 wherein at least one of the reflective surfaces has a largest cross section than a second of the reflective surfaces.
19. The apparatus of claim 9 further comprising a reflective element positioned in the path of the beam to produce at least one laterally reflected beam.
20. The apparatus of claim 9 further comprising a quad-mirror having reflective surfaces and an aperture extending through the center of the quad-mirror.
21. The apparatus of claim 9 further comprising a collimating lens and an enclosure of deformable material, wherein the lens and laser source are at least partially positioned within the enclosure and the lens is positioned in the path of the beam of laser radiation.
22. The apparatus of claim 21 wherein the enclosure may be symmetrically deformed to modify the distance between the lens and the laser source.
23. The apparatus of claim 21 further comprising a reflective element positioned within the enclosure of deformable material in the path of the collimated beam to produce at least one laterally reflected beam.
24. The apparatus of claim 23 wherein the enclosure of deformable material further comprises holes in the enclosure to allow passage of laterally reflected beams.
25. The apparatus of claim 23 wherein the enclosure of deformable material may be asymmetrically deformed to rotationally deflect the reflective element relative to the collimated beam.

26. The apparatus of claim 9, further comprising a gimbal-mounted pendulum allowing for substantially pendular motion relative to an axis of rotation, wherein the laser source is mounted on the pendulum.

27. The apparatus of claim 9, further comprising a conductive spring that provides power to the apparatus and a pendulum, wherein the apparatus is hung from the pendulum.